

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of

BALOGH

Group Art Unit: Unknown

Appln. No: Unknown

Examiner: Unknown

Filed: Herewith

For: **A METHOD AND EQUIPMENT FOR SUPPORTING MOBILITY IN A
TELECOMMUNICATION SYSTEM**

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February 20, 2001

PRELIMINARY AMENDMENT

Hon. Commissioner of Patents
Washington, D.C. 20231

Sir:

Prior to the initial examination of this Application, please consider and enter the following preliminary amendments.

IN THE CLAIMS:

Please amend claims 1-15 as follows:

1. (Amended) A method for supporting mobility in a wireless telecommunications [telecommunication] system, [comprising] the system including at least one terminal, an access point currently serving the terminal and a plurality of other access points, wherein the access points may be grouped into networks and the terminal is [arranged] configured to collect information [about] related to available access points, [characterized by] the method comprising:

checking [the] network names of the available access points[,];

selecting a first access point with [the] best connection attributes [of] from among the available access points having [with the same] a network name [as the] that matches a currently serving access point[,];

selecting a second access point with [the] best connection attributes [of] from among the available access points [with] having a different network name than the currently serving access point[,];

comparing one or more connection attributes of the first access point and the second access point[,]; and

establishing a connection to the second access point if [the] differences between [said] the compared connection attributes fulfil pre-determined conditions.

2. (Amended) [A] The method [according to] of claim 1, [characterized by] further comprising:

informing a user of the terminal if the differences between [said] the compared connection attributes fulfil the pre-determined conditions, [and]

wherein the establishing is performed [a connection to the second access point] if the user allows the connection.

3. (Amended) [A] The method [according to any one of the preceding claims, characterized by] of claim 1, further comprising establishing a connection to the first access point if the first access point is not the currently serving access point and at least one of the differences between [said] the compared connection attributes does not fulfil the pre-determined conditions.

4. (Amended) [A] The method [according to any one of the preceding claims, characterized by] of claim 1, further comprising:

determining the connection attributes based at least on [the] signal levels of available access points[.];

wherein the selecting includes selecting the first and the second access point having respective first and second [the] highest signal levels, comparing [the] includes comparing signal levels of the first and the second access points [point], and establishing is performed [a connection to the second access point] if [the] a difference between the first and second highest signal levels [of the first and the second access point] is above a pre-determined signal level limit.

5. (Amended) [A] The method [according to any one of the preceding claims, characterized by] of claim 1, further comprising:

storing information sets identifying networks by network names in the terminal[.];

comparing [the] network names of available access points to the network names stored in the information sets[.]; and

dropping access points with network names not described in any of the stored information sets.

6. (Amended) [A] The method [according to] of claim 5, [characterized in that] wherein the stored information sets describe settings needed to access networks and their resources, and the connection to the second access point is established using the settings described in the stored information sets.

7. (Amended) [A] The method [according to any one of the preceding claims, characterized by] of claim 1, further comprising collecting information about available access points, wherein the selecting the first and the second access point and the comparing the one or more connection attributes are performed periodically.

8. (Amended) [A] The method [according to any one of the preceding claims, characterized in that] of claim 1, wherein the networks are sub-networks of logical [WLAN] wireless local area networks.

9. (Amended) A terminal comprising:

a transceiver [for communicating] configured to communicate with an access point [and];

collecting means for collecting information [about] related to available access points;[, characterized in that the terminal further comprises]

checking means for checking the network names of the available access points[,];

selection means for selecting a first access point [with the] having best connection attributes of the available access points [with the same] having a network name [as the] matching a currently serving access point and configured to select [for selecting] a second access point [with the] having best connection attributes of the available access points [with] having a different network name than the currently serving access point[,];

comparison means for comparing one or more connection attributes of the first access point and the second access point[,]; and

access means for establishing a connection to the second access point if [the] differences between [said] the compared connection attributes fulfil pre-determined conditions.

10. (Amended) [A] The terminal [according to] of claim 9, [characterized in that the terminal comprises] further comprising:

user interface means for informing user of [the] a terminal if the differences between [said] the compared connection attributes fulfil the pre-determined conditions, [and]

wherein the access means are arranged to establish a connection to the second access point if the user allows the connection.

11. (Amended) [A] The terminal [according to] of claim 9; [or 10, characterized in that] wherein the access means are arranged to establish a connection to the first access point if the first access point is not the currently serving access point and at least one of the differences between [said] the compared connection attributes does not fulfil the pre-determined conditions.

12. (Amended) [A] The terminal [according to any one of the claims 9 – 11, characterized in that] of claim 9, wherein different connection attributes are weighted differently.

13. (Amended) [A] The terminal [according to any one of the claims 9 - 12, characterized in that] of claim 9, further comprising:

[the terminal comprises] memory means for storing information sets identifying networks by network names and describing settings needed to access networks and [their] associated network resources,

wherein the checking means are arranged to compare the network names of available access points [to the] with network names stored in the information sets, [the checking means

are arranged to] drop access points with network names not described in any of the stored information sets, and [the access means are arranged to] establish a connection to the second access point using the settings described in the stored information sets.

14. (Amended) [A] The terminal [according to any one of the claims 9 - 13 characterized in that] of claim 9, wherein the connection attributes are determined at least based on [the] signal levels of the available access points,

wherein the selection means are arranged to select the first and the second access point having [the] highest signal levels,

wherein the comparison means are arranged to compare the signal levels of the first and the second access point, and

wherein the access means are arranged to establish a connection to the second access point if the difference between the respective first and second signal levels [of the first and the second access point] is above a pre-determined signal level limit.

15. (Amended) [A] The terminal [according to any one of the claims 9 - 14, characterized in that] of claim 9, wherein the terminal is a mobile terminal and is arranged to access wireless local area networks[(WLANs)].

Please add new claims 16-22 as follows:

--16. A terminal comprising:

a transceiver configured to communicate with an access point;

at least one collector configured to collect information related to available access points;

at least one checker configured to check the network names of the available access points;

at least one selector configured to (i) select a first access point having best connection attributes of the available access points having a network name matching a currently serving access point and (ii) select a second access point having best connection attributes of the available access points having a different network name than the currently serving access point;

at least one comparator configured to compare one or more connection attributes of the first access point and the second access point; and

at least one access device configured to establish a connection to the second access point if differences between the compared connection attributes fulfil pre-determined conditions.--

--17. The terminal of claim 16, further comprising:

at least one user interface configured to inform a user of a terminal if the differences between the compared connection attributes fulfill the pre-determined conditions,

wherein the at least one access device is arranged to establish a connection to the second access point if the user allows the connection.--

--18. The terminal of claim 16, wherein the at least one access device is configured to establish a connection to the first access point if the first access point is not the currently serving access point and at least one of the differences between the compared connection attributes does not fulfil the pre-determined conditions.--

--19. The terminal of claim 16, wherein different connection attributes are weighted differently.--

--20. The terminal of claim 16, further comprising:

at least one memory device configured to store information sets identifying networks by network names and describing settings needed to access networks and associated network resources,

wherein the at least one checker is configured to (i) compare the network names of available access points with network names stored in the information sets, (ii) drop access points with network names not described in any of the stored information sets, and (iii) establish a connection to the second access point using the settings described in the stored information sets.--

--21. The terminal of claim 16, wherein the connection attributes are determined at least based on signal levels of the available access points,

wherein the at least one selector is configured to select the first and the second access point having highest signal levels, the at least one comparator is configured to compare the signal levels of the first and the second access point, and the at least one access device is configured to establish a connection to the second access point if the difference between the respective first and second signal levels is above a pre-determined signal level limit.--

--22. The terminal of claim 16, wherein the terminal is a mobile terminal and is arranged to access wireless local area networks.--


REMARKS

Preliminary to the examination of the above-identified application, Applicant amends claims 1-15 and adds new claims 16-22. Upon entry of this Amendment, claims 1-22 will be pending.

All matters having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early notice to that effect is respectfully requested.

Respectfully submitted,

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